



United States Department of Energy  
Nuclear Criticality Safety Program (NCSP)

# US/France Joint Experiments Program

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# MIDAS

- **MIDAS = Moyens d'Irradiation et d'expérimentations Dédiés à l'Analyse de Sûreté – criticité**
- Translated into English, MIDAS = Irradiation devices and experimental facilities devoted to the criticality safety assessment
- Joint US/French project to refurbish two critical assemblies (SELINE and Apparatus B) and the building in which they currently reside in Valduc France
- Parties include US DOE NNSA NCSP; French Institut de Radioprotection et de Sûreté Nucléaire (IRSN); and French Commissariat à l'Energie Atomique CEA





# MIDAS Schedule

- Currently conducting a feasibility study – Pre Conceptual Design and cost estimate
- Feasibility Study completed in late Spring 2012 with Go/No-Go decision scheduled for June 2012
- If the decision is to proceed; construction will begin next Summer
- Project completion date is 2021
- Operational Phase planned for 10 – 20 years (till 2041)





# WHY MIDAS ?

- New SELINE capable of delayed critical and super prompt critical experiments with solutions containing U; Pu; Actinides and other materials of interest
- New Apparatus B capable of horizontal split table configuration
- Opportunity for the US and France to combine resources to construct a unique facility for criticality studies that neither country could afford to do on its own
- US share of experiment time is estimated to be between 30-40%





# Questions ?

